

# Semester One Review

1 High velocity would describe a jet that is moving quickly in a certain direction. The term most closely related to velocity is

- A friction
- B height
- C altitude
- D speed

2 When a person rows a boat, he pushes the water backwards, but the boat goes forward. This is an example of Newton's Third Law, which states \_\_\_\_\_.

- A what comes up must come down.
- B energy is always conserved.
- C for every action there is an equal and opposite reaction.
- D every object in motion tends to stay in motion unless acted on by an external force.

3 Minerals have a number of physical properties which are used to identify minerals. Three of these properties involve light. LUSTER is the property which describes how light

- A is absorbed by the mineral.
- B is reflected off the surface of the mineral.
- C is refracted by a piece of a mineral crushed to a powder.
- D becomes fluorescent in a mineral.

4 These rocks are called metamorphic rocks. These minerals formed

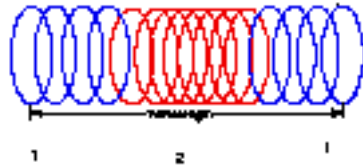
- A on the ocean floors.
- B near the surface of the earth in magma chambers.
- C deep underground.
- D on the surface of the Earth's crust after erosion.

5 What testing procedure would you use to determine the color of a mineral by viewing the color of its powdered form?

- A specific gravity measurement
- B streak test
- C hardness test
- D luster test

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6 In the diagram, label 2 is pointing to the red portion of the longitudinal wave. What is the name of this part of the wave?

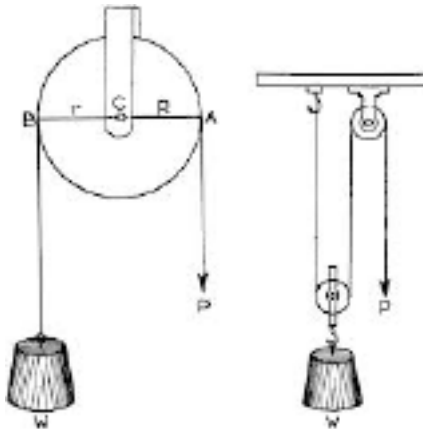


- A compression
- B crest
- C rarefaction
- D trough

7 What happens when two solid plates move toward each other?

- A They bunch up and fold into mountains.
- B One moves under the other.
- C They create volcanoes and earthquakes.
- D All of the above are true.

8 What type of simple machine is represented by the image?



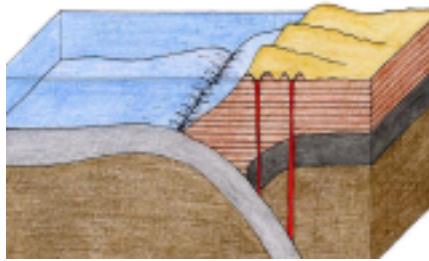
- A Wheel and axle
- B pulley
- C wedge
- D lever

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9 For centuries it has been known that there are volcanoes around the entire Pacific Ocean. Today we know these volcanoes were and are formed by plate tectonics. Early explorers began calling this

- A the Pacific island chain.
- B the Hawaiian Islands.
- C the Subduction Zone.
- D the Ring of Fire.

10 When an oceanic plate moves under a continental plate this is known as \_\_\_\_\_.



- A divergent boundary
- B subduction zone
- C a mid ocean ridge
- D a transform fault

11 The majority of the volcanic mountains are formed at which type of boundary?

- A transform
- B divergent
- C convergent
- D mantle

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12 The type of cell shown is a



- A Animal cell.
- B Plant Cell.
- C Bacteria cell.
- D

13 New oceanic crust is formed by

- A earthquakes at transform faults.
- B sea-floor spreading at mid-ocean ridges.
- C volcanoes at convergent boundaries.
- D magnetic reversals on the ocean floor.

14 \_\_\_\_\_ refers to the natural processes that moves sediment from one location to another.

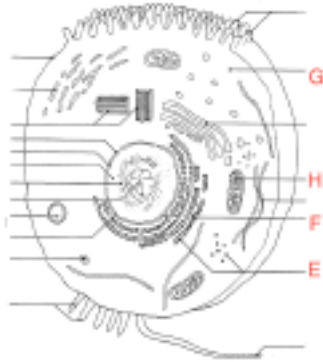
- A Subduction
- B Weathering
- C Oxidation
- D Erosion

15 A tree's roots breaking up a rock face along a road side causes the rocks to fall. This is known as

- A erosion
- B mechanical weathering
- C chemical weathering
- D sedimentation

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16 The organelle labelled H in the picture is the



- A Nucleus.
- B Ribosome.
- C Golgi Body.
- D Mitochondria

17 Force = Mass X Acceleration

Knowing this, how could the amount of force be maintained if the mass is increased?

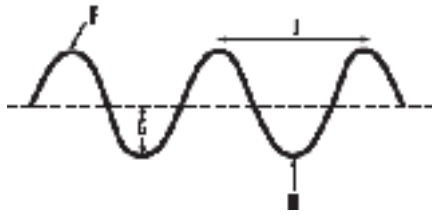
- A increase acceleration
- B decrease acceleration
- C decrease momentum
- D increase friction

18 Force is measured in units called \_\_\_\_\_.

- A calories
- B inches
- C newtons
- D neutrons

# Semester One Review

19 The type of wave pictured to the right is a



- A longitudinal wave
- B compressional wave
- C transverse wave
- D sound wave

20 What type of simple machine is being represented here?



- A a Lever
- B a wedge
- C a pulley
- D a screw

21 For a substance to be called a mineral it must meet FOUR criteria. Which of the following is NOT part of the definition of a mineral?

- A it can be a solid or a liquid
- B it has a crystal structure
- C it is made from in-organic material
- D it is formed in nature

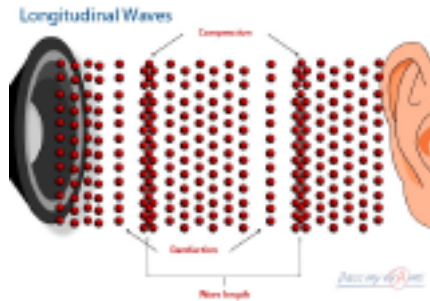
22 Tectonic plates are pieces of the earth's surface that make up the lithosphere. This layer is

- A a combination of the crust and the mantle
- B a combination of the crust and solid core

# Semester One Review

- C made only of liquid core
- D made only of continental crust

23 In the picture, the type of wave is a



- A light wave
- B transverse wave
- C seismic
- D compression

24 The term accelerate means to move

- A slower
- B higher
- C faster
- D lower

25 The velocity of a wave is measured in meters per second. What is the velocity of a wave that has a frequency of 25 Hz and a wavelength of 10 m?

velocity = frequency x wavelength

- A 15 m
- B 35 m/s
- C 200 m
- D 250 m/s

26 The medium through which a sound wave travels is \_\_\_\_\_

- A air
- B light
- C rock
- D water

# Semester One Review

27 What turns melted magma into hard, igneous rock?

- A metamorphism
- B cooling
- C compaction and cementation
- D weathering

28 Igneous, metamorphic and sedimentary rocks form in different ways. Which describes metamorphism, or the formation of metamorphic rocks?

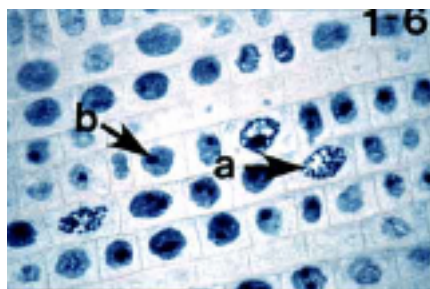
- A rocks form by the deposition of organic material
- B deep in the earth's crust, preexisting rocks are changed by intense heat and pressure
- C liquid rock material cools and hardens when its environment changes
- D layers of sediments settle after the movement of water or wind.

29  $\text{Speed} = \text{distance}/\text{time}$

Meteorites travel at about 50 miles per second. Using the formula, how far could a meteorites travel in 20 seconds.

- A 70 miles
- B 300 miles
- C 700 miles
- D 1000 miles

30 The dividing cells pictured here are most likely \_\_\_\_\_ cells because of their box like shape.

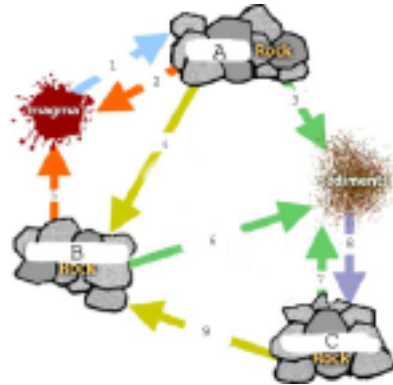


- A Animal
- B Plant
- C Bacteria
- D



# Semester One Review

31 Which processes in the rock cycle change a igneousc rock (A) into an metamorphic rock (B)?



- A weathering and erosion
- B heat and pressure
- C melting and cooling
- D cementing and compaction

32 A mineralogist does a hardness test on an unknown mineral. It is SOFTER than Malachite but HARDER than Gypsum. The mineral is most likely

Mohs Hardness Scale		
1	Talc	Baby Powder
2	Gypsum	Plaster
3	Calcite	Copper Penny Gold Silver (2.5-3)
4	Malachite (3.5-4)	Fluorite
5	Lapis (4.5-5)	Turquoise (5-6)
6	Opal (5.5-6)	Glass (6-7)
7	Jasper (6.5-7)	
8	Emerald (7.5-8)	Agate (7-8)
9	Ruby	
10	Diamond	?

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- A Talc
- B Lapis
- C Calcite
- D Jasper

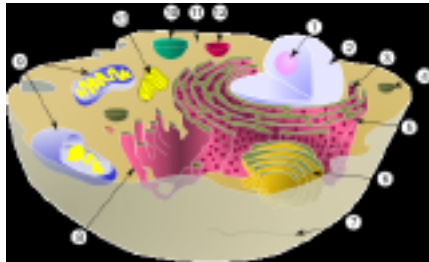
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33 What two simple machines is this person using to move the load of dirt?



- A screw: lever
- B lever: wedge
- C wheel and axle: pulley
- D lever : wheel and axle

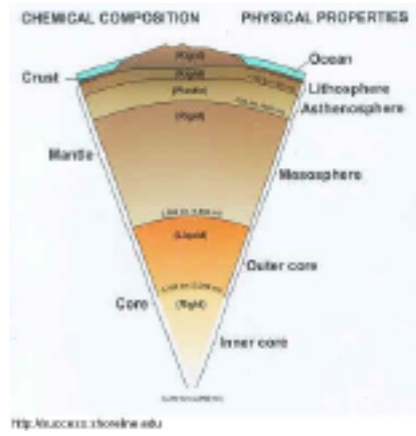
34 Which organelle shown is responsible for delivering proteins and other necessary items within the cell?



- A 7 the cell membrane
- B 13 the centrioles
- C 12 the peroxisomes
- D 5 the endoplasmic reticulum

# Semester One Review

35 As you travel from the crust to the core, what happens to the temperature?



- A The temperature will increase and then decrease.
- B The temperature will decrease.
- C The temperature will increase.
- D The temperature will not change.

## Answer Key: Semester One Review

Question	Key
1	D
2	C
3	B
4	C
5	B
6	A
7	D
8	B
9	D
10	B
11	C
12	B
13	B
14	D
15	B
16	D
17	B
18	C
19	C
20	
21	A
22	A
23	D
24	C
25	D
26	A
27	B
28	B
29	D
30	B
31	B

## Answer Key: Semester One Review

Question	Key
32	C
33	D
34	D
35	C